



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,214	12/15/2003	Rostislav Solta	R.304572	4792

7590 02/10/2006
RONALD E. GREIGG
GREIGG & GREIGG P.L.L.C.
Suite One
1423 Powhatan Street
Alexandria, VA 22314

EXAMINER

PILKINGTON, JAMES

ART UNIT PAPER NUMBER

3682

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,214

Applicant(s)

SOLTA, ROSTISLAV

Examiner

James Pilkington

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/21/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 12/21/2004.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
 - Character 1 not shown in Fig. 1 as stated on page 6
 - Character 30 not shown in Fig. 2 as stated on page 8
 - Character 90 not shown in Fig. 7 as stated on page 16
2. Figures 1-3 are objected to under 37 CFR 1.83(a) because they fail to show the arrangement of the sensor as described in the specification and claims. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "78" has been used to designate both a bearing region and a hollow peg. It also appears that the reference characters "78" and "74" are being used to designate the same structural element.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the driver being integrally with the pedal lever, as in clm 9, and the recess being integrally with the bearing block, as in clm 11, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The prestressing of the driver pin to the recess is not adequately disclosed in the specification in a way that allows the reader to fully understand how the prestressing method is applied.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 3 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clm 1, recites the limitation "which bearing region at least a part of the radially outer circumferential surface." There is insufficient antecedent basis for this limitation in the claim as no prior mention of the bearing region being circular is present.

Re clm 3, is the bearing region (of clm 1) and the bearing face (74) one and the same or two separate distinct structural elements? It appears as though they are one and the same (see DWG OBJ). Thus, the phrase "...further comprising a plurality of partly cylindrical bearing faces..." in clm 3 renders the clm unclear.

Re clm 12, the term "slightly smaller" is a relative term which renders the claim indefinite. The term "slightly smaller" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3682

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, and 3, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Byram et al, USP 5,295,409.

Re clm. 1, Byram et al discloses an accelerator pedal module (10) comprising a:

- Bearing block (65)
- Pedal lever (14) retained rotatably about a pivot axis (Fig. 1) on the bearing block (65)
- Rotation sensor (34, col. 3 lines 7-10) having a sensor shaft (12) actuated by the pedal lever (14), the sensor shaft being coaxial with the pivot axis (Fig. 1)
- Part of the sensor shaft (12) being directly supported rotatably in a bearing bore (18) of a bearing region that is integral with the bearing block (65), of which bearing region (which is cylindrical) at least a part of the radially outer circumferential surface forms at least one bearing face (18, 28) for the pedal lever (14).

It is noted that the term “integral” is taken to mean joined together in any manner essential for completeness. It is also noted that the term “bearing region” is taken to mean any bearing or combination of bearings allowing for the rotation of the pedal.

Re clm. 2, Byram et al disclose the bearing region being formed by a hollow peg (18) of the being block (65), the hollow peg being coaxial with the pivot axis.

Re clm. 3, Byram et al disclose a plurality of partly cylindrical bearing faces (84, col 5 lines 60-61, Figs. 1 and 2) of different diameter.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 4 and 5, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Byram et al in view of White et al, USP 5,385,068.

Re clm 4, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose complementary bearing faces of the pedal lever that are coaxial with the pivot axis and partly cylindrical.

White et al teach the use of a pedal lever (34) with partly cylindrical bearing faces (35, 36) that are associated with bearing faces on member (13) and is coaxial with the pivot axis (Fig. 1) for the purpose of linking the movement of the pedal to the rotational sensor shaft (14) (col 3 lines 55-60).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and provide partly cylindrical bearing faces to the pedal lever to allow for a direct link between the pedal lever and the pivot axis for the purpose of linking the movement of the pedal to the rotational sensor, as taught by White et al.

Re clm. 5, Byram et al disclose all of the claimed subject matter as described above.

Byram et al disclose the use of a restoring spring system (32) to restore the pedal lever (14) to an idling position.

13. Claims 6-12, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Byram et al in view of White et al, USP 5,385,068 and further in view of Papenhagen et al, USP 5,805,376.

Re clm 6, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose two cheeks that are integral with the bearing block.

Papenhagen et al teach the use of cheeks (15) for the purpose of providing a location to firmly retain the pedal without any play (col. 3 lines 4-5).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and provide a set of cheeks to provide a firm retaining area for the pedals to remove play from the system, as taught by Papenhagen et al.

Re clm 7, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose the sensor shaft being rotationally coupled directly to the pedal lever by means of at least one driver protruding radially through a wall of the hollow peg.

Papenhagen et al teach the use of a driver (19) which is rotationally coupled directly to the pedal lever (3) for the purpose of coupling the sensor shaft to the pedal (Fig. 2) (col 3 lines 41-53).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and provide a driver as a method of directly coupling the sensor shaft and the pedal, as taught by Papenhagen et al.

Re clm. 8, Byram et al also disclose one end of the sensor shaft (12) being rotatably supported in the bearing bore (18) and the other end of the sensor shaft (12) is rotatably supported in a sensor housing (88) that is fixed on bearing block (85).

Re clm. 9, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose the driver being embodied integrally with either the pedal lever or the sensor shaft.

Papenhagen et al disclose the driver (19) being embodied integrally with the pedal lever (3) (Fig 2) for the purpose of directly coupling the pedal to the rotating sensor shaft (26).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and have the driver embodied integrally with the pedal lever to directly couple the pedal to the rotating sensor shaft, as taught by Papenhagen.

Re clm 10, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose that the hollow peg of the bearing block comprises a slot, open toward the sensor housing for the lateral introduction of the driver.

Papenhagen et al, disclose the driver (19) traveling through a hollow peg (17) at slot location (18) before connecting to the sensor shaft (26) at slot (27)(Figs. 1 and 3) for the purpose of directly coupling the pedal to the sensor shaft.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and provide a driver that travels through the hollow peg at slot locations to directly couple the pedal to the sensor shaft, as taught by Papenhagen et al.

Re clms. 11 and 12, Byram et al disclose all of the claimed subject matter as described above.

Byram et al do not disclose the use of a driving pin, embraced with prestressing, in a recess (clm 11) wherein the recess is formed by a blind bore, whose cross section is slightly smaller than the cross section of the driver pin and at least one side of the blind bore elastically deforms upon the introduction of the driver pin (clm 12).

Papenhagen et al teach the use of a driver pin (19) that is embraced with prestressing in the recess (26), said driver pin (19) having an end which is wider than the cross section of the blind bore (26) on the rotating shaft. The wider cross section is used for the purpose of firmly mounting the pedal (3) to the sensor shaft (26) (col 3 lines 50-53).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Byram et al and provide a driver pin, that is

Art Unit: 3682

embraced with prestressing, and a wider cross section than the blind bore to firmly mount the pedal to the sensor shaft, as taught by Papenhagen et al.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Pilkington
02-06-2006


RICHARD W. RIDLEY
PRIMARY EXAMINER
SLE du 3682